# **Laboratory Information Management Systems (LIMS)**

# **▼ FIRST DAY**

Information Management Systems Overview: Needs Assessment, Planning, Structure, Design, Advantages

In-House Planning for Customized Database
Detailed Description of Each Module

Addressing of Individual Laboratories' Unique Needs and Possible Solutions: Database Module Planning

Commercial Offerings vs. Custom Written Software: What Should I Do?

**Economics of LIMS:** Economic Justification of the System

Implementation of LIMS: Writing an Implementation Plan. Case Studies from the "Real World"

How to Conduct a Vendor Audit When Selecting Your LIMS: What Questions Should You Ask, What Should You Look For?

### ▼ SECOND DAY

Downsizing of LIMS Systems: Client/Server Architecture Microcomputer-Based LIMS Systems vs. Minicomputer-Based LIMS Systems

Distributed Processing and Local Area Networks

**Database Selection:** How to Choose, Which is "Better," Alternatives

Introduction to Computer Security: How Secure is your System? How Secure Does it Need to Be? Concerns and Considerations

Good Laboratory Practices (GLP)

Good Automated Laboratory Practices (GALP)

Good Manufacturing Practices (GMP)

#### **▼ THIRD DAY**

Software Validation: Requirements; Testing Acceptance

The Integrated Laboratory: Its Role in the Automated Laboratory

Instrumentation—LIMS Interactions: While data acquisition is not a part of this course, the role of automated data collection and interaction with the laboratory information management system will be addressed.

Writing the Request for Proposal (RFP): A Vendor's Perspective

## **▼ FOURTH DAY**

Introduction to Bar Code

Bar Code Overview: Bar Code Basics, Bar Code Protocols—Advantages and Functionality of Each; The Role of Bar Code in the Laboratory; Data Arrangement and Structuring for Bar Coding

Bar Code Printing—Off Site and On Site: Preprinted vs. In-House Printing of Labels; Labels, Inks, Adhesives for Each Application

Implementation of Bar Code: Interaction with LIMS Laboratory; Production Environments; Front-End Processing and Software Packages; Bar Code Equipment—Interfacing and Data Transfer to and from Micros, Minis or Mainframe

Workshop: Writing the Request for Proposal (RFP) WrapUp/Question and Answer

Evening Sessions on First, Second and Third Days—Vendor Overviews of Their LIMS: Opportunity for each of the participants to see a number of extended vendor demonstrations after the formal class is ended at approximately 5:00 p.m. Representatives from six of the following vendors will be present (two vendors per day): Axiom Systems, Blaze Systems, Hewlett Packard, Laboratory Information and Management Systems, Inc., Laboratory MicroSystems, Lab Systems, LabWare, Perkin Elmer, and Quality Systems International (QSI).

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problem areas, computer users' views on the benefits of computerization, and how laboratory instrumentation is integrated cal area networks (LANs), as well as distributed processing systems and their role in large and small laboratories, will also be o various network architectures available. Also presented will be a section on database selection, auditing a LIMS vendor, rell as some LIMS vendor profiles detailing system specifications and system features. Some shortcomings of these off-the-shelf alutions. A session on the incorporation of Bar Code into the Laboratory Environment will be presented along with equipment, the Request for Proposal (RFP) will be included. Saving money and avoiding the mistakes commonly associated with attempts ipants should note that the inclusion of vendor demonstrations and vendor participation is an integral part of this course, but so time.